

Notice of Allowability	Application No.	Applicant(s)
	10/580,984	DOBSON, CURTIS
	Examiner	Art Unit
	CHIH-MIN KAM	1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/29/2011.
2. ☒ The allowed claim(s) is/are 1-5,7,8,10 and 18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20110525</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>3/29/2011</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

/Chih-Min Kam/
Primary Examiner, Art Unit 1656

DETAILED ACTION

Status of the Claims

1. Claims 1-5, 7, 8, 10 and 18 are pending.

Applicants' amendment filed March 29, 2011 is acknowledged. Applicants' response has been fully considered. Claims 1-5, 7, 8, 10 and 18 have been amended, and claims 11, 13, 14 and 16-17 have been cancelled. Since the product claims are allowable, the method claim (i.e., claim 10) is rejoined with the product claim for examination. Therefore, claims 1-5, 7, 8, 10 and 18 are examined.

Withdrawn Claim Objections

2. The previous objection of claims 3 and 4 is withdrawn in view of applicants' amendment to claim 1 and applicants' response at pages 6-7 in the amendment filed March 29, 2011.

Withdrawn Claim Rejections - 35 USC § 112

3. The previous rejection of claims 1-2, 5, 8 and 18 under 35 U.S.C. 112, first paragraph, written description, is withdrawn in view of applicants' amendment to the claim, and applicants' response at pages 5-6 in the amendment filed March 29, 2011.
4. The previous rejection of claims 1-2, 5, 7, 8 and 18 under 35 U.S.C. 112, second paragraph, is withdrawn in view of applicants' amendment to the claim, and applicants' response at page 6 in the amendment filed March 29, 2011.

Examiner's Amendment

An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

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1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Linda Truong on May 25, 2011.

Examiner's Amendment to the Claims:

Claims 1 and 2 have been amended as follows:

1. (Currently amended) An isolated polypeptide or analogue thereof, comprising a tandem repeat of apolipoprotein B, wherein the isolated polypeptide or analogue thereof is according to formula I:

abcRKRxyza'b'c'RKRx'y'z' (I)

wherein

a and a' are each independently selected from the group consisting of a positively charged residue, which is Arginine (R), Lysine (K) or Histidine (H), Leucine (L), ~~or~~ Tryptophan (W), and deleted;

b and b' are each independently selected from the group consisting of Leucine (L), Arginine (R), Lysine (K), and deleted;

c and c' are each independently selected from the group consisting of Threonine (T), Tryptophan (W), and a positively charged residue, which is Arginine (R), Lysine (K) or Histidine (H);

x and x' are each independently selected from the group consisting of Glycine (G), Tryptophan (W), Leucine (L), and a positively charged residue, which is Arginine (R), Lysine (K) or Histidine (H);

y and y' are each independently selected from the group consisting of Leucine (L), a positively charged residue, which is Arginine (R), Lysine (K) or Histidine (H), and deleted; and

z and z' are each independently selected from the group consisting of a positively charged residue, which is Arginine (R), Lysine (K) ~~[[,]]~~ or Histidine (H), ~~or~~ Leucine, and deleted,

or a truncation thereof comprising the tandem repeat of apolipoprotein B, ~~characterised~~ characterized in that the tandem repeat or truncation thereof comprising the tandem repeat of

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apolipoprotein B is obtained from a heparin sulphate proteoglycan (HSPG) receptor binding region of apolipoprotein B.

2. (Currently amended) The isolated polypeptide or analogue thereof according to claim 1, wherein the polypeptide or analogue thereof comprises a tandem repeat which is obtained from an apolipoprotein B low density lipoprotein (LDL) receptor binding domain cluster

B.

The following is an Examiner's Statement of Reasons for Allowance: The following reference is related to the claimed invention. Lunec *et al.* (WO 98/42751) teach a molecule having the sequence of RLTRKRGLKLA or a partially modified form thereof or analog thereof inhibits uptake by the high affinity LDL receptor of LDL, and the sequence is residues 3359-3369 of apolipoprotein B 100, where the sequence of RLTRKRGLKLA comprises the instant SEQ ID NO:1, RLTRKRGLK. However, Lunec *et al.* do not teach or suggest an isolated polypeptide or analog thereof comprising a tandem repeat of apolipoprotein B, where the polypeptide or analog thereof is according to formula I (abcRKRxyza'b'c'RKRx'y'z') or a truncation thereof comprising the tandem repeat of apolipoprotein B and a method of treating a viral infection by administering the polypeptide. Therefore, the claims are allowable over the art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached at 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chih-Min Kam/

Primary Examiner, Art Unit 1656

CMK

May 25, 2011